In the Claims

1. (Currently amended) An immunological composition comprising:

a physiologically acceptable non-toxic vehicle containing a purified non-proteolytic streptococcal pyrogenic exotoxin B (SPEB) ~~cysteine protease~~, which produces an immune response in a mammal against Group A streptococcal infection, wherein said SPEB~~cysteine protease~~ comprises at least one amino acid substitution and said amino acid substitution occurs at the amino acid position selected from the group consisting of Lysine145 Lys145), Glutamine185 (Gln185), Cysteine192 (Cys192), Histidine340 (His340), Asparagine356 (Asn356) and Tryptophan357 (Trp357).

2. (canceled)

3. (canceled)

4. (Previously amended) The immunological composition of claim 1, wherein said infection is selected from the group consisting of pharyngitis, tonsillitis, skin infections, acute rheumatic fever, scarlet fever, post-streptococcal glomerulonephritis, and toxic-shock-like syndrome.

5. (Previously amended) The immunological composition of claim 1 further comprising a purified streptococcal M protein antigen.

6. (Previously amended) A method of producing an immune response in mammals comprising:

administering to a mammal an immunological composition comprising, a purified non-proteolytic streptococcal pyrogenic exotoxin B (SPEB) ~~cysteine protease~~ in an amount sufficient to produce an Immune response to a Group A streptococcal infection, wherein said SPEB~~cysteine protease~~ comprises at least one amino acid substitution and said amino acid substitution occurs at the amino acid position selected from the group consisting of Lys145, Gln185, Cys192, His340, Asn356 and Trp357.

7. (Previously amended) The method of claim 6, wherein said immunological composition is given by parenteral administration.

8. (Original) The method of claim 7, wherein said parenteral administration is selected from the group consisting of subcutaneous administration and intramuscular administration.

9. (Previously amended) The method of claim 6, wherein said immunological composition is administered orally.

10. (Original) The method of claim 6, wherein said infection is selected from the group consisting of pharyngitis, tonsillitis, skin infections, acute rheumatic fever, scarlet fever, post-streptococcal glomerulonephritis, sepsis, and toxic-shock-like syndrome.

11. (Previously amended) The method of claim 6, wherein said immunological composition is administered in multiple doses.

12. (Previously amended) The method of claim 6 further comprising: administering to the mammal a purified streptococcal M protein antigen.

13. (Previously amended) The method of claim 12, wherein said immunological composition is given by parenteral administration.

14. (Original) The method of claim 13, wherein said parenteral administration is selected from the group consisting of subcutaneous administration and intramuscular administration.

15. (Previously amended) The method of claim 12, wherein said immunological composition is administered orally.

16. (Original) The method of claim 12, wherein said infection is selected from the group consisting of pharyngitis, tonsillitis, skin infections, acute rheumatic fever, scarlet fever, post-streptococcal glomerulonephritis, sepsis, and toxic-shock-like syndrome.

17. (Previously amended) The method of claim 12, wherein said immunological composition is administered in multiple doses.

18. (Previously amended) The immunological composition of claim 1, where said mammal is human.

19 (Previously added) The method of claim 6, wherein said mammal is a human.

20. (Currently amended) The immunological composition of claim 1, wherein said amino acid substitution is selected from the group consisting of Lys145→ Alanine(Ala)145, Cys192→ Ala192, Cys192→Serine192 (Ser192), His340→Ala340, Gln185→Ala185, Asn356→Ala356 and Trp357→Ala357.

21. (Previous added) The method of claim 6, wherein said amino acid substitution is selected from the group consisting of Lys145→Ala145, Cys192→Ala192, Cys192→Ser192, His340→Ala340, Gln185→Ala185, Asn356→Ala356 and Trp357→Ala357.

22. (Previously amended) The immunological composition of claim 20, wherein said amino acid substitution is Cys192→Ala192 or Cys192→Ser192.

23. (Previously added) The method of claim 21, wherein the amino acid substitution is Cys192→Ala192 or Cys192→Ser192.

24. (Previously amended) The immunological composition of claim 1, wherein said amino acid substitution occurs at Lys145.

25. (Previously amended) The immunological composition of claim 1, wherein said amino acid substitution occurs at Cys192.

26. (Previously amended) The immunological composition of claim 1, wherein said amino acid substitution occurs at Gln185.

27. (Previously amended) The immunological composition of claim 1, wherein said amino acid substitution occurs at Asn356.

28. (Previously amended) The immunological composition of claim 1, wherein said amino acid substitution occurs at Trp357.

29. (Previously amended) The immunological composition of claim 1, wherein said amino acid substitution occurs at His340.

30. (Previously added) The method of claim 6, wherein said amino acid substitution occurs at Lys145.

31. (Previously added) The method of claim 6, wherein said amino acid substitution occurs at Cys192.

32. (Previously added) The method of claim 6, wherein said amino acid substitution occurs at His340.

33. (Previously added) The method of claim 6, wherein said amino acid substitution occurs at Gln185.

34. (Previously added) The method of claim 6, wherein said amino acid substitution occurs at Asn356.

35. (Previously added) The method of claim 6, wherein said amino acid substitution occurs at Trp357.

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Canceled)

46. (Currently amended) A method of producing an immune response in mammals comprising:

administering to a mammal the immunological composition of claims 1, 5, 20, 22, 24, 25, 26, 27, 28, or 29, ~~or 44~~ in an amount sufficient to produce an immune response to a Group A streptococcal infection.

47. (Currently amended) The method of claim ~~45~~46, wherein the mammal is human.